



Drawing on Innovation
CENTRAL WIRE INDUSTRIES

Central Wire
6509 Olson Road
Union, IL 60180

Mr. John Nordine
U. S. EPA Region 5
RCRA Enforcement & Compliance Assurance Branch (LU-16)
77 West Jackson Boulevard
Chicago, IL 60604

RE: Central Wire, Union, IL Monthly Progress Report and Attachments

REVISED JULY 2018 MONTHLY PROGRESS REPORT

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: *[Signature]*

Name: *B. King (for T. Heneveld, VP ops)*

Title: *Ben King*

Date: *9/20/2018*

**Autumnwood ESH Consultants**

6539 Autumnwood Court I
Mount Pleasant, Wisconsin 53403
Phone: 262.237.1130

20 September 2018

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-16)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report, Revision 1
July 2018
EPA ID: ILD005178975

Dear Mr. Nordine:

Enclosed please find the revised RCRA CMI Monthly Progress Report for the Central Wire, Inc. (CWI) facility located in Union, Illinois for July 2018. This has been revised to address your comments in an email dated August 21, 2018.

This report includes the eDMR for the groundwater pump & treat facility, the NPDES laboratory analytical report, which includes the effluent data used in the eDMR and the South Branch Nursery well no. 1 (irrigation) and well no. 2 (restroom) analytical data for Volatile Organic Compounds which are included in the *7-2018 NPDES Analytical Report* file.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

Autumnwood ESH Consultants, LLC

John W. Thorsen, P.E.

JWT: jt

Encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

MONTHLY PROGRESS REPORT
Central Wire Union, Illinois Site
July 2018 Revised

1 Progress Made This Reporting Period

Groundwater Pump & Treat System

In this reporting period Central Wire Inc. (CWI) continued the operation and maintenance of the groundwater extraction and treatment (P&T) system. CWI treated an average of 291,000 gallons per day (GPD) with a maximum daily flow of 302,000 GPD. Table 1, attached, lists the average daily P&T volumes by month from January 2015 through July 2018. The influent flow to the pump and treat system has been reduced by about 30,000 gallons per day per month since November 2017. CWI has received estimates for well rehabilitation has requested corporate approval to address the flow reduction situation. Corporate approval has been received and a work order was sent to Albrecht Well Drilling Inc. on August 24, 2018. Albrecht indicated that work would begin once they received the phosphoric acid which would take approximately 5 days.

In response to comment 2, CWI representatives visited South Branch Nursery (SBN) to get an idea of the flow rates. SBN personnel indicated that the flow varies significantly by the time of day and time of year with no flow from the October – November time frame until the April – May time frame and varies through the growing season with most flows in the spring and early summer, especially if an inch of rain or less is occurring. CWI noted they have a flow meter with a totalizer and recorded the total flow as on 11:00 am on August 24, 2018 and will collect that total flow number in gallons each month when samples of the irrigation well are collected.

The laboratory analytical report for the pump and treat effluent sample is attached. Samples were collected on July 9, 2018 and arrived at Test America Laboratory on July 10, 2018 at 0.7° C.

The monthly NPDES sample met effluent limitations for pH, 1,1,1-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for the month is attached to this report.

South Branch Nursery Well Samples

The South Branch Nursery well samples [well no. 1 [(irrigation) and well no.2 (restroom)] well samples were collected at the same time and sent to the analytical laboratory in the same batch. There were no volatile organic compound detections found in the South Branch Nursery. The analytical data is in the same analytical report as the pump and treat samples. South Branch Nursery locations are provided in Figure 1.

South Branch Nursery Replacement Irrigation and CWI Pump & Discharge Wells at South Branch Nursery

Central Wire has submitted the McHenry County Storm Water Management permit applications for the replacement irrigation well (if needed) and the pump & discharge well. CWI has received comments on both applications, has responded to those comments and the South Branch Nursery replacement irrigation well storm water management permit has been issued. CWI expects the water well permit will be approved soon because of this action.

The county water well permit for the pump & discharge well is contingent on the approval of the storm water management permit for the well site and the discharge outfall. The county is awaiting a Jurisdictional Determination and a Letter of No Objection from the USACE.

Irrigation Well Pumpage

Historically there has been some concern that the Central Sod irrigation wells, located downgradient from the chlorinated plume, has impacted the movement of the plume. As a result, CWI has been monitoring groundwater level fluctuations as the most downgradient monitoring well, DGW-2, since 2010.

Over the month Central Wire personnel read the hour meter on the Central Sod well pump engines for the Route 176 and the Kunde Rd. irrigation wells on a weekly basis. Table 2 provides the data collected from the hour meters on the pump engines. This data is used in Table 3, attached, which plots the groundwater elevations against the daily precipitation and weekly irrigation well pumpage at Central Sod farms. The precipitation data is from the National Weather Service's Marengo station.

Table 2
Summary of 2018 Irrigation Pumping Hours per Week at Central Sod Farms
July 2 through August 1, 2018

Date of Hour Meter Reading	Route 176 Pump		Kunde Rd. Pump		Hours of Irrigation Well Pumping/Week
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped	
6/25/2018	6983	0	4800	0	
7/2/2018	6985	2	4816	16	18
7/9/2018	7021	36	4842	26	62
7/16/2018	7059	38	4877	35	73
7/23/2018	7093	34	4898	21	55
8/1/2018	7216	123	4963	65	188
Totals		233		163	396

Regarding comparing the manual groundwater measurements to the data logger, the last data logger reading of the water level in DGW-2I on 7/2/2018 at 9:53 am

was 26.73 feet or 3.61 feet below the top of casing. The manual measurement on that day at about 10:00 am was 3.61 feet below the top of casing. On 8/1/2018 the manual measurement of the depth of the water below the top of casing in DGW-21 was 6.14 feet below the top of casing at about 3:50 pm. The last data logger reading of the amount of water above the data logger was 24.2 feet or 6.14 feet below the top of casing (30.34 feet [data logger below top of casing] – 24.2 feet = 6.14 feet).

Table 3 shows the groundwater levels plotted against daily precipitation and weekly irrigation well pumpage from July 2 to August 1, 2018.

The groundwater elevation during this period reached its highest level on July 2 at 818.814 feet above mean sea level. The groundwater elevation reached its low on August 1, 2018 at 816.13 feet above mean sea level. The variance during July was 2.684 feet in monitoring well DGW-21.

Regarding EPA comment no. 4, CWI has had a discussion with the sampler on the importance of having no bubbles in VOC vials.

2 **Summary of Validated Data and Results**

Pump & Treat System Monthly NPDES Samples

The permit limitations and analytical results are shown in Table 4, below. There were no effluent limitation exceedances.

Table 4
Central Wire Union Illinois Pump & Treat Effluent Analytical Results

Parameter	Effluent Limitation (Daily Maximum), µg/L	Effluent Analytical Results, µg/L
1,1,1-Trichloroethane	20	<0.38
Tetrachloroethene	20	1.3
Trichloroethene	20	1.2

Table 5 plots the effluent quality from the NPDES grab samples collected monthly of the pump & treat effluent. After the higher concentrations of the effluent limited chemicals were found in the May and June 2018 pump and treat effluent samples, they have come back down to 1.5 mg/L or below, but TCE and PCE are above the averages from August 2017 to August 2018. There is no need to take any action immediately or into the future except to monitor the monthly result. The values found in August 2018 were 23 times lower than the effluent limitation of TCA, 13 times lower for TCE and 15 times for PCS.

South Branch Nursery Well Samples

Central Wire collected samples at the South Branch Nursery [well no. 1(irrigation) and well no.2 (restroom)] on July 9, 2018. See Figure1 for location of these wells. There were no detections of volatile organic compounds in either well. These results are in the attached analytical report.

This NPDES analytical report also has environmental analytical results for CWI's North and South Seepage Ponds. These ponds are Illinois EPA-regulated seepage ponds for CWI's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and for storm water collection.

- 3 **Upcoming Events/Activities Planned** – CWI will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in our NPDES permit.

CWI has reapplied for the NPDES permit for this system adding a second discharge for the pump and discharge system and awaits permit issuance by IEPA. The current permit expired on May 31, 2018. IEPA has verbally informed CWI that they could continue to operate their pump and treat system under the expired permit until the new permit is issued. The new permit has been public noticed and there have been requests for a public hearing. IEPA is currently making the determination on holding a public hearing.

CWI has submitted a water well permit applications to the McHenry County Health Department for the replacement irrigation well for South Branch Nursery and the pump and discharge well and is responding to comments at this time.

CWI plans to meet as needed with Goodmark Nurseries work out details and schedules and met with them on June 18, 2018 to identify the desired location and receive approval from Goodmark Nurseries. That approval was obtained.

Samples will continue to be collected at the South Branch Nursery wells [well no. 1(irrigation) and well no.2 (restroom)] every month when the irrigation pumps are operating, usually between May and November of each year.

- 4 **Anticipated Problem Areas and Recommended Solutions** – None.

- 5 **Key Personnel Changes** – None.

- 6 **Target and Actual Completion Dates** – This project has not deviated from the project schedule.